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(54) **COIN COLLECTION LOCK AND KEY**

(76) Inventors: **Asil T. Gokcebay**, 703 Market St., San Francisco, CA (US) 94103; **Yucel K. Keskin**, 3667 Magellan, Santa Clara, CA (US) 95051

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Primary Examiner—Edwin C. Holloway, III
(74) *Attorney, Agent, or Firm*—Thomas M. Freiburger

(57) **ABSTRACT**

A mechanical lock and key includes an electronic access control feature for preventing opening of the lock unless prescribed conditions are met. The lock cylinder, preferably the cylinder plug, is fitted with a small ID or "serial number" chip which is read when a voltage is applied. A connected addressable switch is connected to a solenoid capable of withdrawing a blocking pin, when the switch is activated. The mechanical key has a key head with a battery, microprocessor and database. When the key is inserted into the lock, a one-wire bus connection sends the lock ID to the key's microprocessor, a comparison is made by the microprocessor to determine whether the lock is authorized to be opened, and if so; a code for the addressable switch, determined from the key database, is sent via the one wire bus to the switch, powering the solenoid, withdrawing the blocking pin and enabling opening of the lock. A record is made in the database as to each instance of opening of each lock which the key fits. In electric parking meters, for example, cash count data can be read by the key and recorded for auditing the route. Rewritable memory can be included in the lock to store the cash count data gathered by the key for subsequent audit or, in situations involving several keys and a simple lock, to store a series of previous entry events for audit.

15 Claims, 13 Drawing Sheets